

REMARKS

In the Office Action, the Examiner noted that claims 1-20 are pending in the application, claims 1-12, and 14-19 are rejected, and claims 13 and 20 are allowable if rewritten in independent format. The Examiner's rejections are respectfully traversed below.

Rejections under 35 USC §102

Claims 10, 12 and 14 were rejected under 35 USC §102(b) as being anticipated by Holmen et al. (U.S. Pat. No. 4,784,721). The Applicants respectfully submit that the claims as amended are not prima facie anticipated.

With respect to Claims 10, 12, and 14, Holmen et al. does not teach or disclose a pressure sensor with a pressure sensing element, but rather an airflow sensor using heated resistors for measuring mass air flow. In addition, with respect to Claims 12 and 14, the Examiner points to Column 5 of Holmen et al. as teaching of a heating element capable of heating the pressure sensing element to at least about the maximum application temperature of the pressure sensor and wherein the heating element heats the pressure sensing element to over 200°C. This is simply not the case. Column 5 of Holmen et al. describes part of the process for manufacturing this airflow sensor. The Applicants can find no teaching in Column 5 which describes the application capabilities of the device in Holmen et al. Given the Applicants' amendment, the Applicants respectfully request withdrawal of this rejection.

Claims 16-18 were rejected under 35 USC §102(b) as being anticipated by Fujii et al. (U.S. Pat. No. 4,975,390). The Applicants respectfully submit that the claims as amended are not prima facie anticipated.

With respect to Claims 16-18, Fuji et al. does not teach or disclose a pressure sensor wherein the pressure sensor is capable of measuring pressures of greater than 1000 psi without premature failure. Given the Applicants' amendment, the Applicants respectfully request withdrawal of this rejection.

Claims 1-9 and 19 were rejected under 35 USC §103 (a) as being unpatentable over Fujii et al. in view of Ellis (U.S. Pat. Nos. 4,975,390 and 4,784,721). The Applicants respectfully point out that the Examiner has issued a 103(a) rejection and question whether the Examiner wishes to change this to a 103(b) rejection. Regardless,

the Applicants respectfully submit that the claims as now amended are not prima facie obvious.

With respect to Claims 1-9, neither Fuji et al. nor Ellis teaches or discloses a pressure sensor wherein at temperatures of at least about 200 °C, the pressure sensor has a gage factor of at least about 27. The Examiner alleges that Ellis discloses a gage factor that falls in the range of at least about 27. Ellis does not. Ellis Figure 4 shows a maximum gauge factor of 25.0. In addition and more importantly, Ellis does not show gauge factors of at least about 27 at elevated temperatures of at least about 200 °C nor correspondingly with respect to Claims 2 and 3 gauge factors of 32 nor 37 at elevated temperatures of at least about 200 °C. With respect to Claims 4-6, neither Fuji et al. nor Ellis teaches or discloses a pressure sensor wherein at temperatures of at least about 400 °C, the pressure sensor has a gage factor of at least about 22, 30 or 35, respectively. With respect to Claims 7-9, neither Fuji et al. nor Ellis teaches or discloses a pressure sensor wherein at temperatures of at least about 550 °C, the pressure sensor has a gage factor of at least about 16, 25 or 35, respectively.

With respect to Claim 19, neither Fujii et al. nor Ellis teaches or discloses a pressure sensor whercin the pressure sensor is capable of measuring pressures of greater than about 3000 psi without premature failure.

In addition with respect to Claims 1-9, and 19, the Applicants further submit that the Examiner has not given any reason, suggestion, or motivation in the references, or from the references cited as a whole for the person of ordinary skill to have combined or modified the references. The Applicants submit that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting such combination. If such suggestion or incentive is in the references, the Applicants respectfully request that the Examiner particularly point out the relevant sections of those references cited which suggest or motivate his combination of those references. If the Examiner is alleging that a person of ordinary skill would have be motivated to combine such references, the Applicant respectfully submits that how a person of ordinary skill in the art would have been motivated must be in the personal knowledge of the Examiner, and therefore respectfully requests that the Examiner in his next Official Action submit an affidavit detailing as

specifically as possible such motivation (see 37 CFR §1.104 (d) (2)). Given the reasons in this response, the Applicants respectfully request withdrawal of this rejection.

Claims 11 and 15 were rejected under 35 USC §103 (a) as being unpatentable over Holmen et al. in view of Ellis (U.S. Pat. Nos. 5,898,359 and 4,784,721). The Applicants respectfully point out that the Examiner has issued a 103(a)-rejection and question whether the Examiner wishes to change this to a 103(b) rejection. Regardless, the Applicants respectfully submit that the claims as now amended are not prima facie obvious.

In addition with respect to Claims 11 and 15, Holmen et al. and Fujii et al do not teach nor disclose a pressure sensor with a heating element cable of heating the pressure sensing element to at least about the application temperature of the pressure sensor. Additionally, Holmen et al. does not even teach or disclose a pressure sensor with a pressure sensing element, but rather describes an airflow sensor using heated resistors for measuring mass air flow.

With respect to Claims 11 and 15, the Applicants further submit that the Examiner has not given any reason, suggestion, or motivation in the references, or from the references cited as a whole for the person of ordinary skill to have combined or modified the references. The Applicants submit that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting such combination. If such suggestion or incentive is in the references, the Applicants respectfully request that the Examiner particularly point out the relevant sections of those references cited which suggest or motivate his combination of those references. If the Examiner is alleging that a person of ordinary skill would have been motivated to combine such references, the Applicant respectfully submits that how a person of ordinary skill in the art would have been motivated must be in the personal knowledge of the Examiner, and therefore respectfully requests that the Examiner in his next Official Action submit an affidavit detailing as specifically as possible such motivation (see 37 CFR §1.104 (d) (2)). Given the reasons in this response, the Applicants respectfully request withdrawal of this rejection.

CONCLUSION

For all the above reasons the Applicants respectfully submit that the application is in condition for allowance and that action is earnestly solicited.

Respectfully submitted,

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Dated



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